DETAILED ACTION

1.   This communication is in response to the application filed on 11/23/11 in which claims

20-24 have been presented for examination.

Claim Rejections - 35 USC § 103

2.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.

4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

4.   Claims 20-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al. (U.S. Pub No. 2005/0002409 A1) in view of Kondo et al. (U.S. Pub. No. 2005/0206581 A1) and further in view of Lakaniemi et al. (U.S. Pub. No. 2003/00043856 A1).

Claim 20, Lai explains an acoustic signal packet transmitting method for a communication apparatus including a transmitting unit and a receiving unit, in the transmitting unit (Lai, par 0001). The paragraph shows communication between mobile terminals in a packet network, the mobile terminals are shown to have transmitting and receiving unit. Lai show a step of dividing an acoustic signal such as a voice or music signal into given time segments called frames to generate a frame acoustic signals, and a containing step of containing the frame acoustic signal and the acoustic signal corresponding data in packets and transmitting the packets (Lai, par 0017, 0019, 0083, 0085, 0086). The paragraphs show systems that are able to transmit and receive voice data. It shown where acoustic signal is signaled into time segments frames contained in a buffer.

Lai show the acoustic signal packet transmitting method further comprises in the receiving unit, a determination step of determining at least one of a jitter state of a received packet and a loss state of a received packet a step of using the result of the determination made in the determination step to determine as a targeted value of the number of stored packets, the number of packets to be stored in the receiving buffer and in the transmitting unit (Lai, par 0022, 0095, 0097, 0099, 0100, 0105). The paragraphs show determining a jitter state of a received packet and determining a target value of stored packets in the buffer.

Lai fail to show association with respective frame numbers a containing step of containing in each packet a frame acoustic signal of a current frame an acoustic signal corresponding data of a past frame preceding the current frame by a difference between the frame numbers of the current frame and the past frame and a delay amount control information indicating the difference.

In an analogous art Kondo show association with respective frame numbers a containing step of containing in each packet a frame acoustic signal of a current frame an acoustic signal corresponding data of a past frame preceding the current frame by a difference between the frame numbers of the current frame and the past frame and a delay amount control information indicating the difference [Kondo, par 0352, 0374, 0514]. The paragraphs show association with respective frame numbers an audio frame that that corresponds to data of a past frame preceding the current frame by difference between the frame numbers of the current and past frame, and indicating the difference.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai and Kondo because this allows coded voice features to be retained over a predetermined number of frames.

Lai and Kondo fails to show generating from each frame acoustic signal corresponding data corresponding to the frame acoustic signal of each frame and a containing step of containing the frame acoustic signal and the acoustic a step of setting the delay amount control information to a value smaller than or equal to the targeted value of the number of stored packet which is determined at the receiving unit.

In an analogous art Lakaniemi show generating from each frame acoustic signal corresponding data corresponding to the frame acoustic signal of each frame [par0041, 0042] and a containing step of containing the frame acoustic signal and the acoustic a step of setting the delay amount control information to a value smaller than or equal to the targeted value of the number of stored packet which is determined at the receiving unit (Lakaniemi, abstract, par 0012, 0025, 0028). The paragraphs show setting the delay amount information to a desired jitter buffer residency and showing the reducing the delay to half of the audio frame length.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai, Kondo, and Lakaniemi because the determining step adjusts the synchronization delay so that the average duration approach a desired jitter duration.

Claim 21, Lai provides an acoustic signal packet communicating method between a first communication apparatus including both a transmitting unit and a receiving unit and a second communication apparatus including both a transmitting unit and a receiving unit, comprising (Lai, par 0001); in the transmitting unit in the first communication apparatus: a step of dividing an acoustic signal such as a voice or music signal into given time segments called frames to generate frame acoustic signals and generating, from each frame acoustic signal, acoustic signal corresponding data as data corresponding to the frame acoustic signal; and a containing step of containing the frame acoustic signal and the acoustic signal corresponding data in each packet and transmitting the packet (Lai, par 0085, 0086). The paragraphs show systems that are able to transmit and receive voice data. It shown where acoustic signal is signaled into time segments frames contained in a buffer. Lai show in the receiving unit in the second communication

apparatus: a determination step of determining at least one of a jitter state of a received packet

and a loss state of a received packet; a step of using the result of the determination made in the

determination step to determine, as a targeted value of the number of stored packets, the number

of packets to be stored in the receiving buffer (Lai, par 0097, 0099, 0100, 0105) a step of sending

the targeted value of the number of stored packets to the transmitting unit in the second

communication apparatus (Lai, par 0016, 0021, 0092, 0095). The paragraphs show determining

a jitter state of a received packet and determining a target value of stored packets in the buffer.

Lai in the transmitting unit in the second communication apparatus: a step of containing the

targeted value of the number of stored packets sent from the receiving unit in the second

communication apparatus in a packet as information for specifying delay amount control

information to be set in the transmitting unit in the first communication apparatus (Lai, par 0040,

0097). The paragraph shows containing the values in of the stored packets.

Lai fail to show association with respective frame numbers a containing step of

containing in each packet a frame acoustic signal of a current frame an acoustic signal

corresponding data of a past frame preceding the current frame by a difference between the

frame numbers of the current frame and the past frame and a delay amount control information

indicating the difference.

In an analogous art Kondo show association with respective frame numbers a containing

step of containing in each packet a frame acoustic signal of a current frame an acoustic signal

corresponding data of a past frame preceding the current frame by a difference between the

frame numbers of the current frame and the past frame and a delay amount control information

indicating the difference [Kondo, par 0352, 0374, 0514] The paragraphs show association with

respective frame numbers an audio frame that that corresponds to data of a past frame preceding the current frame by difference between the frame numbers of the current and past frame, and indicating the difference.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai and Kondo because this allows coded voice features to be retained over a predetermined number of frames.

Lai and Kondo fail to show in the transmitting unit in the first communication apparatus: a step of setting delay amount control information to a value smaller than or equal to the targeted value of the number of stored packets contained in a packet sent from the transmitting unit in the second communication apparatus.

In an analogous art Lakaniemi show in the transmitting unit in the first communication apparatus: a step of setting delay amount control information to a value smaller than or equal to the targeted value of the number of stored packets contained in a packet sent from the transmitting unit in the second communication apparatus (Lakaniemi, abstract, par 0012 0025). The paragraphs show setting the delay amount information to a smaller than the number of stored buffer data.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai, Kondo, and Lakaniemi because the determining step adjusts the synchronization delay so that the average duration approach a desired jitter duration.

Claim 22 Lai describes an acoustic signal packet communicating method between a first communication apparatus including both a transmitting unit and a receiving unit and a second

communication apparatus including both a transmitting unit and a receiving unit, comprising: in

the transmitting unit in the first communication apparatus: a step of dividing an acoustic signal

such as a voice or music signal into given time segments called frames to generate frame

acoustic signals and generating, from each frame acoustic signal, acoustic signal corresponding

data as data corresponding to the frame acoustic signal; (Lai, par 0001, 0085, 0086). The

paragraphs show systems that are able to transmit and receive voice data. It shown where

acoustic signal is signaled into time segments frames contained in a buffer. Lai show the

acoustic signal packet communicating method comprises: in the receiving unit in the second

communication apparatus: a step of measuring, as a remaining buffer amount, the number of

packets stored in the receiving buffer (Lai, par 0072, 0074, 0075, 0076, 0122). The paragraphs

show measuring a remaining buffer amount of the number of packet stored. Lai also show a step

of sending the remaining buffer amount to the transmitting unit in the second communication

apparatus; in the transmitting unit in the second communication apparatus: a step of containing

the remaining buffer amount sent from the receiving unit in the second communication apparatus

in a packet as information for specifying delay amount control information to be set in the

transmitting unit in the first communication apparatus and transmitting the packet (Lai, par 0016,

0077, 0088, 0095, 0121, 0122). The paragraph shows containing the values of the remaining

buffer of the stored packets.

Lai fail to show association with respective frame numbers a containing step of

containing in each packet a frame acoustic signal of a current frame an acoustic signal

corresponding data of a past frame preceding the current frame by a difference between the

frame numbers of the current frame and the past frame and a delay amount control information indicating the difference.

In an analogous art Kondo show association with respective frame numbers a containing step of containing in each packet a frame acoustic signal of a current frame an acoustic signal corresponding data of a past frame preceding the current frame by a difference between the frame numbers of the current frame and the past frame and a delay amount control information indicating the difference [Kondo, par 0352, 0374, 0514] The paragraphs show association with respective frame numbers an audio frame that that corresponds to data of a past frame preceding the current frame by difference between the frame numbers of the current and past frame, and indicating the difference.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai and Kondo because this allows coded voice features to be retained over a predetermined number of frames.

Lai and Kondo fail to show in the transmitting unit in the first communication apparatus: a step of setting delay amount control information to the remaining buffer amount contained in a packet sent from the transmitting unit in the second communication apparatus.

In an analogous art Lakaniemi show in the transmitting unit in the first communication apparatus: a step of setting delay amount control information to the remaining buffer amount contained in a packet sent from the transmitting unit in the second communication apparatus (Lakaniemi, abstract, par 0012 0025). The paragraphs show setting the delay amount information to a smaller than the number of stored buffer data.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai, Kondo, and Lakaniemi because the determining step adjusts the synchronization delay so that the average duration approach a desired jitter duration.

Claim 24 Lai, Kondo, and Lakaniemi convey a computer readable recording medium that has stored therein an acoustic signal packet transmitting program for causing a computer to perform the steps of the acoustic signal packet transmitting method according to claim 20 (Lai, par 0043, 0084). The paragraphs show a computer readable recording medium that has stored therein an acoustic signal packet transmitting program.

5.   Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al. (U.S. Pub No. 2005/0002409 A1) in view of Kondo et al. (U.S. Pub. No. 2005/0206581 A1) further in view of Lakaniemi et al. (U.S. Pub. No. 2003/00043856 A1) and furthermore in view of Serizawa (U.S. Pub No. 2002/0169859).

Claim 23 Lai conveys an acoustic signal packet communicating apparatus comprising: a transmitting unit having: means for dividing an acoustic signal such as a voice or music signal into given time segments called frames to generate frame acoustic signals; and means for generating from each frame acoustic signal, acoustic signal corresponding data as data corresponding to the frame acoustic signal; containing means for containing the frame acoustic signal and the acoustic signal corresponding data in each packet; and means for transmitting the packets; and a receiving unit having: a receiving buffer for storing therein received packets; (Lai, par 0085, 0086). The paragraphs show systems that are able to transmit and receive voice data.

It shown where acoustic signal is signaled into time segments frames contained in a buffer. Lai show the receiving unit further comprises determining means for determining at least one of a jitter state of a received packet and a loss state of a received packet and means for determining, as the targeted value of the number of stored packets, the number of packets to be stored in a receiving buffer by using the result of the determination made by the determining means; (Lai, par 0092, 0095, 0097, 0099). The paragraphs show determining a jitter state of a received packet and determining a target value of stored.

Lai fail to show association with respective frame numbers a containing step of containing in each packet a frame acoustic signal of a current frame an acoustic signal corresponding data of a past frame preceding the current frame by a difference between the frame numbers of the current frame and the past frame and a delay amount control information indicating the difference.

In an analogous art Kondo show association with respective frame numbers a containing step of containing in each packet a frame acoustic signal of a current frame an acoustic signal corresponding data of a past frame preceding the current frame by a difference between the frame numbers of the current frame and the past frame and a delay amount control information indicating the difference [Kondo, par 0352, 0374, 0514] The paragraphs show association with respective frame numbers an audio frame that that corresponds to data of a past frame preceding the current frame by difference between the frame numbers of the current and past frame, and indicating the difference.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai and Kondo because this allows coded voice features to be retained over a predetermined number of frames.

Lai and Kondo fail to show the transmitting unit further comprises means for setting the delay amount control information to a value less than or equal to the targeted value of the number of stored packets.

In an analogous art Lakaniemi the transmitting unit further comprises means for setting the delay amount control information to a value less than or equal to the targeted value of the number of stored packets (Lakaniemi, abstract, par 0012 0025). The paragraphs show setting the delay amount information to a smaller than the number of stored buffer data.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Lai, Kondo, and Lakaniemi because the determining step adjusts the synchronization delay so that the average duration approach a desired jitter duration.

Lai, Kondo, and Lakaniemi fail to show loss detecting means for determining whether or not a packet containing a frame acoustic signal associated with the number of the frame to be extracted is stored in the receiving buffer; acoustic signal packet decoding means for, when it is determined in the loss detecting means that the packet containing the frame acoustic signal associated with the frame number of the frame to be extracted is stored in the receiving buffer, extracting the frame acoustic signal from the packet stored in the receiving buffer and providing the frame acoustic signal as a frame output acoustic signal; loss handling means for, when a packet loss occurs as determined in the loss detecting means in that the packet containing the frame acoustic signal associated with the frame number of the frame to be extracted is not stored

in the receiving buffer, extracting an acoustic signal corresponding data for the frame as a lost

frame, from a packet stored in the receiving buffer and generating a frame output acoustic signal

by using the acoustic signal corresponding data; and means for Z frame output acoustic signals

outputted from the acoustic signal packet decoding means or the loss handling means and

outputting the reproduced frame output acoustic signal said loss handling means in the receiving

unit is configured to obtain, when a packet loss occurs, acoustic signal corresponding data having

the same frame number as that of a lost frame from the packet in the receiving buffer by using

the delay amount control information included in the packet.

In an analogous art Serizawa show loss detecting means for determining whether or not a

packet containing a frame acoustic signal associated with the number of the frame to be extracted

is stored in the receiving buffer; (par 0013) acoustic signal packet decoding means for, when it is

determined in the loss detecting means that the packet containing the frame acoustic signal

associated with the frame number of the frame to be extracted is stored in the receiving buffer,

extracting the frame acoustic signal from the packet stored in the receiving buffer and providing

the frame acoustic signal as a frame output acoustic signal (par 0040, 0048); loss handling means

for, when a packet loss occurs as determined in the loss detecting means in that the packet

containing the frame acoustic signal associated with the frame number of the frame to be

extracted is not stored in the receiving buffer, extracting an acoustic signal corresponding data

for the frame as a lost frame, from a packet stored in the receiving buffer and generating a frame

output acoustic signal by using the acoustic signal corresponding data; and means for generating

as a reproduced acoustic signal frame output acoustic signals outputted from the acoustic signal

packet decoding means or the loss handling means and outputting the reproduced frame output

acoustic signal said loss handling means in the receiving unit is configured to obtain, when a

packet loss occurs, acoustic signal corresponding data having the same frame number as that of a

lost frame from the packet in the receiving buffer by using the delay amount control information

included in the packet; (Serizawa, abstract, par 0093, 0094, 0097). The paragraph show a

determining means of loss of a packet containing a frame acoustic signal associated with the

number of the frame to be extracted is stored in the receiving buffer whether has been lost and

determining whether or packet lost exist as a whole. The transferring of the loss handling means

and outputting the reproduced frame output acoustic signal for reuse.

At the time of the invention it would have been obvious to one of ordinary skill in the art

to combine the teachings of Lai, Kondo, Serizawa, and Lakaniemi because this allow the

deterioration of voice quality of a decoded signal to be reduced.

Response to Arguments

6.   Applicant's arguments with respect to claims 20-24 have been considered but are moot in

view of the new ground(s) of rejection. In addition, Applicant's arguments filed 11/23/11 have

been fully considered but they are not persuasive.

Applicant's argument:

1. Claims 20-24 are currently pending, Claims 20-24 having been amended. The changes

    and additions to the claims do not add new matter and are supported by the originally

    filed specification, for example, on page 7, lines 5-16; page 15, lines 8-19.

2. In the outstanding Office Action, Claim 24 was rejected under 35 U.S.C. §112, first

    paragraph, as failing to comply with the written description requirement; Claim 24 was

rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter; Claims

20-22 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lai et al.

(U.S. Pub. No. 2005/0002409, hereinafter "Lai") in view of Ofek (U.S. Patent No.

6,038,230) and Lakaniemi et al. (U.S. Pub. No. 2003/00043856, hereafter "Lakaniemi");

and Claim 23 was rejected under 35 U.S.C. §103(a) as being unpatentable over Lai in

view of Ofek, Lakaniemi, and Serizawa (U.S. Pub. No. 2002/0169859).

3. With respect to the rejection of Claim 24 under 35 U.S.C. §112, first paragraph, the

Examiner states that "Claim 24 states 'means for concatenating frame output acoustic

signals outputted from the acoustic signal packet decoding means or the loss handling

means and outputting the concatenated frame output acoustic signal.'"

4. However, Claim 24 does not have this recitation at all. Applicants note that previous

Claim 23 did recite the above-noted feature, therefore it is assumed that the Examiner

intended to rejection Claim 23 under 35 U.S.C. §112, first paragraph instead of Claim 24.

Furthermore, Applicant submits that the present amendment to Claim 23, which now

recites "means for generating, as a reproduced acoustic signal, frame output acoustic

signals outputted from the acoustic signal packet decoding means or the loss handling

means and outputting the reproduced acoustic signal," renders this ground of rejection

moot.

5. With respect to the rejection of Claim 24 under 35 U.S.C. §101, Applicants

respectfully submit that the present amendment to Claim 24, reciting a "non-transitory

computer readable recording medium," overcomes this ground of rejection. Furthermore,

Applicants note that Claim 24 has been amended to comply with Director Kappos' memo

of January 27, 2010, which stated that the subject matter eligibility of a computer

readable medium may be secured by excluding signal based embodiments described in

the specification. To this end, Applicants have adopted the language "non-transitory" as

suggested in the memo to address U.S Patent and Trademark Office formalities only.

More specifically, it is noted that the recitation of"non-transitory" is a limitation of the

medium itself (i.e, tangible, not a signal) as opposed to a limitation on data storage

persistency (e.g., RAM vs. ROM).

Examiner's response:

   The amendments in regards to the 112 and 101 rejections overcome the rejections.

Applicant's argument:

6. Applicant argues this method includes a similarity to the present invention in that a delay

    amount is utilized; however, the technical meaning of synchronization delay in

    Lakaniemi completely differs from the delay control information corresponding to the

    frame number difference between the frame acoustic signal and the acoustic signal

    corresponding data to be contained in the same packet, and the signal processing using

    the delay amount is also completely different between Lakaniemi and the present

    invention.

7. However, Lai does not disclose anything about controlling a frame number difference

    between a frame acoustic signal and acoustic signal corresponding data to be contained in

    the same packet.

8. Ofek does not disclose or suggest any idea of controlling the frame number difference in association with the control of a jitter absorption buffer.

9. Serizawa does not teach anything about controlling a frame number difference of a frame acoustic signal and acoustic signal corresponding data to be contained in the same packet.

10. Thus, Applicants submit that in Claim 20, in which a frame number difference between a frame acoustic signal and acoustic signal corresponding data to be contained in each packet is controlled based on at least one of jitter state and loss state, is not obvious based on Lai, Ofek, Lakaniemi and Serizawa, either alone or in proper combination.

11. Thus, paragraphs [0085] and [0086] do not disclose or suggest anything about generating acoustic signal corresponding data corresponding to the frame acoustic signal.

Examiner's response:

The examiner respectfully disagree in applicant's specification an acoustic signal waveform having the length equivalent to the pitch period is cut out and arranged to generate a lost acoustic signal. In an analogous art Lakaniemi par 0041, 0042, show generating data corresponding to lost frames of speech signals.

Applicant's argument:

12. Applicant argues however, there is no description in Lai about determining of a targeted value of the number of stored packets based on at least one of jitter state and a loss state.

Examiner's response:

The examiner respectfully disagree in [Lai, par 0022], it show data in a jitter buffer may be arrange in groups according to a sample size value.

Applicant's argument:

13. Applicant argues in Ofek, each switch is nothing more than a repeater and does not perform frame-dividing of an acoustic signal.

14. In cols. 4, 9 and 11 cited by the Examiner, there is disclosed nothing similar to a delay amount control information to be contained in each packet.

15. Lakaniemi relates to a device for regenerating an audio signal from packets received from a network, wherein synchronization delay is adjusted by insertion or removal of samples. This regeneration device does not possess either functions or constructions for transmitting an acoustic signal in packets. Therefore, Lakaniemi does not disclose or suggest anything about setting delay amount control information to a targeted value.

16. Therefore, Applicants respectfully submit that amended Claim 20 (and all associated dependent claims) patentably distinguishes over Lai, Ofek, Lakaniemi and Serizawa, either alone or in proper combination.

Examiner's response:

The examiner respectfully disagrees in (Lakaniemi, abstract, par 0012, 0025, 0028). The paragraphs show setting the delay amount information to a desired jitter buffer residency and showing the reducing the delay to half of the audio frame length.

Applicant's argument:

17. Applicants respectfully disagree with this assertion. Lai's paragraphs [0092] and [0095] describe of an address generator for generating write addresses for writing received packets in a jitter buffer 918 and read addresses for reading out data from the jitter buffer. Paragraph [0093] of Lai explains that the data read out of the jitter buffer 918 is provided to a local buffer 906. This is the same as in Fig. 1, where data read out of the jitter buffer 108 is written in a local buffer 110, but there is no suggestion of the step of sending the targeted value recited in claim 21.

18. As already discussed above, the step of setting delay amount control information recited in Claim 21 is not disclosed in Lakaniemi for similar reasons as discussed above for

19. Claim 20. It is noted that in Claim 20, the receiving unit in a communication apparatus determines a targeted value, and the transmitting unit in the same communication apparatus sets the delay amount control information to the targeted value or smaller, while in Claim 21, the step of sending the targeted value and the step of containing the targeted value both define processes performed in the second communication apparatus and the step of setting delay amount control information to a value smaller than or equal to the targeted value is performed in the first communication apparatus. Those features of Claim 21 are not disclosed in Lakaniemi.

Examiner's response:

The examiner respectfully disagrees the generator refers to figure 9. Also in [Lai, par 0016, 0021], shows A processing system may access a status store, and then generate write

addresses to a destination buffer for only those voice channels having a predetermined status.

According to another aspect of the embodiments, a system may include an ingress block, a

destination buffer may be a local buffer that is coupled to a synchronous data network, and a

source buffer may be a jitter buffer that is coupled to an asynchronous data network.

The examiner respectfully disagree in applicant's specification an acoustic signal

waveform having the length equivalent to the pitch period is cut out and arranged to generate a

lost acoustic signal. In an analogous art Lakaniemi par 0041, 0042, show generating data

corresponding to lost frames of speech signals. In an analogous art Lakaniemi show generating

from each frame acoustic signal corresponding data corresponding to the frame acoustic signal of

each frame [par0041, 0042] and a containing step of containing the frame acoustic signal and the

acoustic a step of setting the delay amount control information to a value smaller than or equal to

the targeted value of the number of stored packet which is determined at the receiving unit

(Lakaniemi, abstract, par 0012, 0025, 0028). The paragraphs show setting the delay amount

information to a desired jitter buffer residency and showing the reducing the delay to half of the

audio frame length.

Applicant's argument:

1. Applicants respectfully disagree with this assertion. Lai's paragraph [0072] discloses that

   VPBM 500 possesses entry groups of 502-0 to 502-z, each entry group stores a data

   block of one voice channel, and each entry group possesses entry 0 to entry x.

2. However there is no description of determining a current number of stored packets.

3. There is no description in Lai about a remaining buffer amount (number of packets stored in the receiving buffer), nor is there any suggestion of containing in a packet, the remaining buffer amount as the delay amount control information

4. However, paragraph [0077] of Lai does not teach such idea of sending the delay amount control information determined by one communication apparatus to a counterpart communication apparatus to be set therein.

5. Therefore, Applicants submit that the Office Action fails to show how the applied art discloses or suggests all of the features of Claim 22 for the additional reasons set forth above.

Examiner's response:

The examiner respectfully disagree the [Lai, fig 5, par 0074-0076, 0122] show multiplying a channel number by a buffer size value, and adding the product to a base address can point to the bottom of an entry group (502-0 to 502-z) (i.e., index to one particular voice channel group) a particular channel may be written to particular a VPBM entry according to a channel number value, buffer size, and time stamp count.

The examiner respectfully disagrees the generator refers to figure 9. Also in [Lai, par 0016, 0017, 0044, 0045, 0021], shows A processing system may access a status store, and then generate write addresses to a destination buffer for only those voice channels having a predetermined status. According to another aspect of the embodiments, a system may include an ingress block, a destination buffer may be a local buffer that is coupled to a synchronous data network, and a source buffer may be a jitter buffer that is coupled to an asynchronous data

network. The paragraph shows the generator send buffer shows sending data to a destination buffer of a synchronous network.

Applicant's argument:

6. Applicants respectfully disagree with assertion. Serizawa does not suggest anything about containing delay amount control information in packet. However, Serizawa does not disclose anything about extracting acoustic signal corresponding data corresponding to a frame acoustic signal from a different packet (i.e., a packet different in number by the number indicated by the delay amount control information).

7. Therefore, Applicants submit that the Office Action fails to show how the applied art discloses or suggests all of the features of Claim 23 for the additional reasons set forth above.

8. Therefore, for all of the above reasons, Applicants respectfully submit that amended Claims 20-23 (and all associated dependent claims) patentably distinguish over Lai, Ofek, Lakaniemi, and Serizawa either alone or in proper combination.

Examiner's response:

In an analogous art Kondo show association with respective frame numbers a containing step of containing in each packet a frame acoustic signal of a current frame an acoustic signal corresponding data of a past frame preceding the current frame by a difference between the frame numbers of the current frame and the past frame and a delay amount control information indicating the difference [Kondo, par 0352, 0374, 0514] The paragraphs show association with

respective frame numbers an audio frame that that corresponds to data of a past frame preceding

the current frame by difference between the frame numbers of the current and past frame, and

indicating the difference.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JASON HARLEY whose telephone number is (571)270-5435.

The examiner can normally be reached on Monday- Friday 7:00 am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joe Cheng can be reached on (571)272-4433. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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